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# 22 MB. AU 1812 1/19/93

PAGE: 1

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:23:43

1		SEQUENCE LISTING	
2 3	(1) General Information	:	ENTERE
4			
5	(i) APPLICANT: Huston	, James S	
6	Charet	te, Marc F	
7	Cohen,	Charles M	
8		Roberto	
9	•	Peter C	
10		ann, Hermann	
11		, David C	
12		Richard J	
13	iiiugo,		
14	(ii) TITLE OF INVENTIO	N: Product and Process	for the Production,
15	Igolation and	Purification of Recombin	nant Polypeptides
16	1301acion and		
17	(iii) NUMBER OF SEQUENC	ES: 14	
18	(III) NOMBER OF DEGOERO	20. 11	
19	(iv) CORRESPONDENCE AD	DRESS.	
20		reative BioMolecules	
21	(B) STREET: 35 S		
22	(C) CITY: Hopkin		
23	(D) STATE: MA		
24	(E) COUNTRY: USA		
25	(F) ZIP: 01748	•	
26	(1) 211: 01/40		
27	(v) COMPUTER READABLE	FORM:	
28	(A) MEDIUM TYPE:		
29	(B) COMPUTER: IB		
30	(C) OPERATING SY	STEM: PC-DOS/MS-DOS	
31	(D) SOFTWARE: Pa	tentIn Release #1.0, Ver	rsion #1.25
32	(4, 2222	·	
33	(vi) CURRENT APPLICATI	ON DATA:	
34		NUMBER: US/08/014,096	
35	(B) FILING DATE:		
36	(C) CLASSIFICATI		
37	` '		
38	(vii) PRIOR APPLICATIO	ON DATA:	
39	(A) APPLICATION	NUMBER: US 07/661,070	
40	(B) FILING DATE:	26-FEB-1991	
41			
42	(viii) ATTORNEY/AGENT IN	FORMATION:	
43	(A) NAME: Lunn,	Paul G.	
44	(B) REGISTRATION	NUMBER: 32,743	
45	(C) REFERENCE/DO	OCKET NUMBER: CRP-008DV	
46			
47	(ix) TELECOMMUNICATION		
48	(A) TELEPHONE: (		
49	(B) TELEFAX: (50	08) 435-6951	
50			
51			

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:23:47

INPUT SET: S586.raw

```
52
     (2) INFORMATION FOR SEQ ID NO:1:
53
           (i) SEQUENCE CHARACTERISTICS:
54
55
                (A) LENGTH: 4 amino acids
56
                (B) TYPE: amino acid
                (C) STRANDEDNESS: single
57
58
                (D) TOPOLOGY: linear
59
60
         (ii) MOLECULE TYPE: peptide
61
62
        (iii) HYPOTHETICAL: NO
63
64
         (iv) ANTI-SENSE: NO
65
          (v) FRAGMENT TYPE: internal
66
67
68
69
70
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
71
          Ile Glu Gly Arg
72
73
74
     (2) INFORMATION FOR SEQ ID NO:2:
 75
 76
 77
           (i) SEQUENCE CHARACTERISTICS:
 78
                (A) LENGTH: 21 base pairs
                (B) TYPE: nucleic acid
79
                (C) STRANDEDNESS: double
80
81
                (D) TOPOLOGY: linear
82
83
         (ii) MOLECULE TYPE: cDNA
84
85
         (iii) HYPOTHETICAL: NO
86
87
         (iv) ANTI-SENSE: NO
88
89
          (v) FRAGMENT TYPE: N-terminal
90
91
92
         (ix) FEATURE:
93
                (A) NAME/KEY: CDS
             (B) LOCATION: 1..21
94
95
96
97
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
98
99
     GCT AAA AAC CTT AAC GAA GCT
100
     Ala Lys Asn Leu Asn Glu Ala
101
       1
102
```

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:23:52

```
103
104
      (2) INFORMATION FOR SEQ ID NO:3:
105
106
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 7 amino acids
107
                   (B) TYPE: amino acid
108
109
                   (D) TOPOLOGY: linear
110
            (ii) MOLECULE TYPE: protein
111
112
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
113
114
115
     Ala Lys Asn Leu Asn Glu Ala
116
       1
                        5
117
118
      (2) INFORMATION FOR SEQ ID NO:4:
119
           (i) SEQUENCE CHARACTERISTICS:
120
                (A) LENGTH: 13 amino acids
121
122
                (B) TYPE: amino acid
                (C) STRANDEDNESS: single
123
124
                (D) TOPOLOGY: linear
125
          (ii) MOLECULE TYPE: peptide
126
127
         (iii) HYPOTHETICAL: NO
128
129
         (iv) ANTI-SENSE: NO
130
131
132
          (v) FRAGMENT TYPE: internal
133
134
135
136
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
137
           Met Lys Ala Ile Phe Val Leu Lys Gly Ser Leu Asp Glu
138
                                                 10
139
                           5
140
      (2) INFORMATION FOR SEQ ID NO:5:
141
142
           (i) SEQUENCE CHARACTERISTICS:
143
                (A) LENGTH: 16 amino acids
144
145
                (B) TYPE: amino acid
146
                (C) STRANDEDNESS: single
                (D) TOPOLOGY: linear
147
148
          (ii) MOLECULE TYPE: peptide
149
150
151
         (iii) HYPOTHETICAL: NO
152
153
         (iv) ANTI-SENSE: NO
```

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:04

154																	
155		(V)	FRAG	MENT	TYF	E: i	nter	nal									
156		• •															
157																	
158																	
159		(xi)	SEOU	ENCE	DES	CRIE	отт	I: SE	O II	NO:	5:						
160		(11)	рпфо				110.		- E								
161		Mot	Lys	בו מ	т 1 о	Pho	Val	T.011	T.ve	G1v	Ser	T.e.11	Asp	Ara	Asp	Leu	Glu
		nec 1	гур	AIG	116	5	Val	Deu	Lys	011	10			9		15	
162		1				5					10						
163																	
164																	
165	(2)	INFOR	RMATI	ON F	OR S	EEO 1	LD NC	):6:									
166																	
167		(i)	SEQU														
168						59			cids								
169			(B)	TYF	PE: a	amino	aci	id									
170			(C)	STF	RANDE	EDNES	ss: s	sing	le								
171			(D)	TOP	POLO	Y: ]	linea	ar									
172			, ,														
173		(ii)	MOLE	CULE	TYP	E: r	prote	∍in									
174		(,					•										
175		(iii)	HYPO	тнет	TCAL	. NO	)										
176		()															
177		(iv)	א איי	CEI	- प्रश	NO											
178		( + v )	VIII	321	100.	NO											-
		()		1147777	1 myr		J_4		- 1								
179		( \( \nabla \)	FRAC	-MEIVI	LIL	/E: 1	4-ce	CIIITII	31								
180																	
181																	
182				_							_						
183		(xi)	SEQU	JENCE	E DES	CRI	PTIO	N: SI	EQ II	ONO:	:6:						
184																	_
185		Met	Lys	Ala	Ile	Phe	Val	Leu	Lys	Gly	Ser	Leu	Asp	Arg	Asp		Asp
186		1				5					10					15	
187																	
188		Ser	Arg	Leu	Asp	Leu	Asp	Val	Arg	Thr	Asp	His	Lys	Asp	Leu	Ser	Asp
189			-		20		_			25					30		
190																	
191		His	Leu	Va1	Leu	Va1	Asp	Leu	A1a	Ara	Asn	Asp	Leu	Ala	Arq	I1e	Va1
192				35			<u>-</u> -		40	5		•		45	_		
193				•					• •								
194		mh.~	Pro	C1.,	802	A ~~	Tur	Va1	Δ1 a	Aen	T.011	G111					
		1111		GIY	Ser	ALG	TAT	55	nia	пар	Deu	014					
195			50					55									
196		T			- ADE		*D ***	<b>.</b>									
197	(2)	INFO	KMAT]	LON I	COR S	SEQ .	א מז	J: /:									
198								o== -									
199		(i)	SEQU														
200						: 4			rds								
201				,		amino											
202						EDNE			le								
203			(D)	) TOI	POLO	GY:	line	ar									
204																	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:12

```
(ii) MOLECULE TYPE: peptide
205
206
207
         (iii) HYPOTHETICAL: NO
208
209
         (iv) ANTI-SENSE: NO
210
          (v) FRAGMENT TYPE: internal
211
212
213
214
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:
215
216
           Glu Phe Met Arg
217
218
219
      (2) INFORMATION FOR SEQ ID NO:8:
220
221
           (i) SEQUENCE CHARACTERISTICS:
222
                (A) LENGTH: 10 amino acids
223
                (B) TYPE: amino acid
224
                (C) STRANDEDNESS: single
225
                (D) TOPOLOGY: linear
226
227
         (ii) MOLECULE TYPE: peptide
228
229
         (iii) HYPOTHETICAL: NO
230
231
          (iv) ANTI-SENSE: NO
232
233
234
          (v) FRAGMENT TYPE: internal
235
236
237
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:
238
239
           Glu Phe Asp Pro Pro Pro Lys Phe Met Arg
240
                           5
                                                10
241
           1
242
243
      (2) INFORMATION FOR SEQ ID NO:9:
244
           (i) SEQUENCE CHARACTERISTICS:
245
                (A) LENGTH: 13 amino acids
246
247
                (B) TYPE: amino acid
                (C) STRANDEDNESS: single
248
249
                (D) TOPOLOGY: linear
250
251
          (ii) MOLECULE TYPE: peptide
252
         (iii) HYPOTHETICAL: NO
253
254
         (iv) ANTI-SENSE: NO
255
```

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:20

```
256
257
           (v) FRAGMENT TYPE: internal
258
259
260
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:
261
262
263
           Glu Phe Asp Pro Pro Pro Met Pro Arg Lys Phe Met Arg
264
265
     (2) INFORMATION FOR SEQ ID NO:10:
266
267
           (i) SEQUENCE CHARACTERISTICS:
268
                (A) LENGTH: 20 amino acids
269
270
                (B) TYPE: amino acid
271
                (C) STRANDEDNESS: single
                (D) TOPOLOGY: linear
272
273
          (ii) MOLECULE TYPE: peptide
274
275
         (iii) HYPOTHETICAL: NO
276
277
278
          (iv) ANTI-SENSE: NO
279
280
           (v) FRAGMENT TYPE: internal
281
282
283
284
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:
285
           Glu Phe Asp Pro Pro Pro Met Pro Arg Met Pro Asp Pro Glu Leu Arg
286
                                                 10
287
288
           Lys Phe Met Arg
289
290
                       20
291
      (2) INFORMATION FOR SEQ ID NO:11:
292
293
294
           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 193 amino acids
295
                (B) TYPE: amino acid
296
                (C) STRANDEDNESS: single
297
                (D) TOPOLOGY: linear
298
299
          (ii) MOLECULE TYPE: protein
300
301
302
         (iii) HYPOTHETICAL: NO
303
304
          (iv) ANTI-SENSE: NO
305
306
           (v) FRAGMENT TYPE: N-terminal
```

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:28

307 308																	
309																	
310		(xi)	SEQU	UENCE	E DES	SCRIE	OITS	1: SI	II QE	ON C	:11:						
311																	
312		Met	Lys	Ala	Ile	Phe	Val	Leu	Lys	Gly	Ser	Leu	Asp	Arg	Asp	Leu	Asp
313		1	•			5			-	-	10		_	•		15	
314																	
315		Ser	Arg	Ile	Glu	Leu	Glu	Met	Ara	Thr	Asp	His	Lvs	Glu	Leu	Ser	Glu
316					20				_	25	•		-		30		
317																	
318		His	Leu	Met	Leu	Val	Asp	Leu	Ala	Ara	Asn	Asp	Leu	Ala	Arq	Ile	Cys
319				35					40	_		-		45	-		-
320																	
321		Thr	Pro	Gly	Ser	Ara	Tvr	Val	Ala	Asp	Leu	Thr	Lvs	Val	Asp	Ara	Tvr
322		****	50	017	501	••• 9	-1-	55		г			60			5	- 2 -
323			-					••									
324		Ser	Tyr	Val	Met	His	Leu	۷al	Ser	Ara	Val	Val	Glv	Glu	Leu	Ara	His
325		65	-1-				70			9		75	1			5	80
326		0.5															
327		Agn	T.011	Asp	Ala	Leu	His	Ala	Tvr	Ara	Ala	Cvs	Met.	Asn	Met	Glv	Thr
328		пэр	Dea	nsp	niu	85			-1-	9	90	0,0				95	
329						03					, ,						
330		T.011	Ser	Gly	Δla	Pro	Lvs	Val	Ara	Ala	Met	Gln	Leu	Ile	Ala	Glu	Ala
331		Deu	Der	O <sub>1</sub>	100	110	2,2	***	9	105		<b></b>			110		
332					100					103							
333		Glu	Glv	Arg	Ara	Ara	Glv	Ser	Tvr	Glv	Glv	Ala	Val	Glv	Tvr	Phe	Thr
334		GIU	Gry	115	my	,, <u>r</u>	OLY	261	120	013	011			125	-1-		
335				113					120								
336		Δla	ніс	Gly	Acn	Leu	Agn	Thr	Cvc	Tle	Val	Tle	Ara	Ser	Ala	Leu	Val
337		ALG	130	GLY	изр	пеа	нэр	135	Cys	110	<b>741</b>	110	140	501		200	
338			130					100					1.0				
339		Glu	Δen	Gly	Tla	Δla	Thr	Val	Gln	Ala	Glv	Ala	Glv	Val	Val	Leu	Asp
340		145	non	Gry	110	niu	150	•	<b>01</b>		017	155	0-1				160
341		143					130					100					
342		Sor	Val	Pro	Gln	Ser	Glu	Ala	Asn	Glu	Thr	Ara	Asn	Lvs	Ala	Ara	Ala
343		Jer	vul	110	01	165	014		p	O_Lu	170	9		_, _		175	
344						103											
345		Va 1	T.011	Arg	Δla	Tle	Δla	Thr	Δla	His	His	Ala	Gln	Glu	Phe	Pro	Glv
346		***	Dea	9	180					185			<b></b>		190		1
347					100												
348		Glu															
349		GIU															
350																	
351	121	INFO	омат.	TON 1	FOD '	SEO .	א או	2.12									
352	(2)	THEO	WHIT.	-011		JUY .	-0 140	· · ± £	-								
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### RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:36

```
358
359
         (ii) MOLECULE TYPE: protein
360
361
         (iii) HYPOTHETICAL: NO
362
363
         (iv) ANTI-SENSE: NO
364
          (v) FRAGMENT TYPE: N-terminal
365
366
367
368
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:
369
370
          Met Lys Ala Ile Phe Val Leu Lys Gly Ser Leu Asp Arg Asp Leu Asp
371
372
373
          Ser Arg Leu Asp Leu Asp Val Arg Thr Asp His Lys Asp Leu Ser Asp
374
375
376
          His Leu Val Leu Val Asp Leu Ala Arg Asn Asp Leu Ala Arg Ile Val
377
378
379
           Thr Pro Gly Ser Arg Tyr Val Ala Asp Leu Glu
380
381
382
     (2) INFORMATION FOR SEQ ID NO:13:
383
384
385
           (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: 21 amino acids
386
387
                (B) TYPE: amino acid
388
                (C) STRANDEDNESS: single
389
                (D) TOPOLOGY: linear
390
391
         (ii) MOLECULE TYPE: peptide
392
         (iii) HYPOTHETICAL: NO
393
394
395
         (iv) ANTI-SENSE: NO
396
           (v) FRAGMENT TYPE: internal
397
398
399
400
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:
401
402
          Met Lys Ala Ile Phe Val Leu Lys Gly Ser Leu Asp Arg Asp Leu Glu
403
                                                10
                                                                     15
404
405
406
           Phe Met Pro Pro Cys
407
                       20
408
```

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:44

409	(2) INFO	RMATION FOR SEQ ID NO:14:
410 411	(i)	SEQUENCE CHARACTERISTICS:
412	(-/	(A) LENGTH: 19 amino acids
413		(B) TYPE: amino acid
414		(C) STRANDEDNESS: single
415		(D) TOPOLOGY: linear
416		
417	(ii)	MOLECULE TYPE: peptide
418	, ,	
419	(iii)	HYPOTHETICAL: NO
420		
421	(iv)	ANTI-SENSE: NO
422		
423	(V)	FRAGMENT TYPE: internal
424		
425		
426		
427	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:14:
428		
429		Lys Ala Ile Phe Val Leu Lys Gly Ser Leu Asp Arg Asp Leu Glu
430	1	5 10 15
431		
432	Phe	Met Cys
433		
434		

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:46

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Line

Error

Original Text

34

Wrong application Serial Number

(A) APPLICATION NUMBER: US/08/014,096

## SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:50

INPUT SET: S586.raw

<< THERE ARE NO ITEMS MISSING >>

# SEQUENCE CORRECTION REPORT PATENT APPLICATION US/08/014,096

DATE: 09/28/93 TIME: 10:24:51

INPUT SET: S586.raw

Line

Original Text

Corrected Text